REMARKS

Reconsideration of the present application is respectfully requested.

Summary of Office Action

Claims 1-4, 6-15, 42-45, 47-60 and 62-75 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claims 1, 4, 6, 7, 11, 12, 14, 15, 42, 45, 47, 48, 52, 53, 55-57, 60, 63, 63, 67, 68 and 70-74 stand rejected under 35 U.S.C. § 103(a) based on Tso (U.S. Patent no. 6,088,803) in view of Takahashi et al. (European Patent App. No. 903901 A2). The remaining claims each stand rejected under 35 U.S.C. § 103(a) based on Tso in combination with Takahashi and one or more additional references.

Summary of Amendments

Claims 1-75 have been canceled. Claims 76-89 are newly added. No new matter has been added.

Summary of Examiner Interview

A telephonic interview was conducted between the Examiner and Applicant's representative (the undersigned) on 10/15/2007. A proposed new claim substantially similar to claim 76 above was discussed, during which Applicant's representative pointed out what are thought to be several differences from the cited art which make the invention as presently claimed patentable over the cited art. No particular agreement was reached, and the Examiner indicated she would further consider Applicant's arguments when a formal response is filed.

Discussion of Rejections

Section 112(1) Rejections

The rejections under 35 U.S.C. § 112, first paragraph, are moot in view of the cancellation of claims 1-75.

Prior Art Rejections

Claims 76 and 82

New claim 76 recites:

76. (New) A method including

receiving at a storage server, from a requester, a request for an object stored at the server;

in response to the request, determining at the storage server whether to cause a processing device to access the object stored at the storage server and perform an operation on data associated with the object, wherein the processing device is separate from the storage server and is not in a path from the requester to the object, wherein said determining includes determining whether to cause the processing device to perform the operation based at least partially on a file space containing the object:

causing the processing device to perform the operation in response to a specified outcome of said determining;

receiving at the storage server a result of the operation from the processing device; and

conditionally allowing access to the object in response to the request according to the result of the operation. (Emphasis added.)

The cited references do not disclose or suggest such a method, either individually or in combination. In particular, the cited references do not disclose or suggest that a storage server determines whether to cause a processing device, which is separate from the storage server and is not in a path from the requester to the object, to perform an operation on data associated with an object stored at the storage server,

wherein the determination is based at least partially on a file space containing the object.

Note that the term "processing device" has been used in the new claims rather than the term "cluster device". In the rejection of claim 1 (now canceled), the Office cited Tso to show a server and a cluster device. However, the network device 4 in Tso (cited as the "cluster device") is directly in the path from the requester (the client 12) to the object (since the object is stored in the content server 7), unlike the "processing device" in new claim 76.

In addition, Applicant does not find any disclosure or suggestion in the cited references that a storage server makes any determination of whether to cause a separate processing device to perform an operation on data associated with an object stored at the storage server. Indeed, in Tso, the network device 4 performs the virus checking scan anytime a file is requested from the content server 7 (see col. 2, line 62 to col. 3, line 5 and Fig. 2). Further, the network device 4 in Tso is not a storage server.

Further, Applicant does not find any disclosure or suggestion in the cited references that a storage server makes such a determination based at least partially on a file space containing the object. The Office has cited Garrison (U.S. Pat. 6,275,939) as disclosing certain functions being performed based at least partly on a file type (Office Action, p. 10); however, a file type is not the same as, or even similar to, a file space containing the object.

For the above-stated reasons, therefore, claim 76 and all claims which depend on it are thought to be patentable over the cited art.

Claim 82 includes limitations similar to those in claim 76. Therefore, claim 82 and all claims which depend on it are also thought to be patentable over the cited art, for reasons similar to those discussed above.

Claims 86 and 88

New claim 86 recites:

86. (New) A method including

receiving at a storage server a client request for an object stored at the server:

assigning by the storage server a specific access type to a processing device that is separate from the storage server and is not in a path from the client to the object, the specific access type allowing the processing device to perform an operation on the object even while another user has a lock on the object;

causing the processing device to perform the operation; receiving at the storage server a result of the operation from the processing device; and conditionally allowing access to the object in response to the client

request according to the result of the operation. (Emphasis added.)

As with the claims discussed above, claim 82 also recites that the processing device is separate from the storage server and is not in a path from the client to the object. The cited references are not seen to disclose or suggest this feature, as discussed above.

In addition, the cited references are not seen to disclose or suggest that a storage server assigns a specific access type to a separate processing device to allow the processing device to perform an operation on the object even while another user has a lock on the object. Note that canceled claims 9 and 75 used slightly different operation in this regard, i.e., they recited "assigning an access type to said cluster

device, said access type allowing said cluster device to perform said operation notwithstanding user locks associated with said object."

The Office cited Midgely (U.S. Pat. 5,604,862) as disclosing this functionality, however, the Office did not indicate where in Midgely it is supposedly disclosed (Office Action. p. 12). The Office alleged that Midgely discloses "the cluster device having a list that allows it access, but disallows user access at that time". However, the limitation in question was not intended to mean that all users are excluded from access when the cluster device has access; rather, it was intended to mean that at least one user other than the cluster/processing device has a lock on the object while the cluster/processing device has access. The phrasing used in new claims 86 and 88 is intended to make this meaning more clear.

Applicant finds no disclosure or suggestion in Midgley of assigning a specific access type to a separate processing device to allow the processing device to perform an operation on an object even while another user has a lock on the object. If the Office disagrees and intends to maintain this same ground of rejection against new claim 86 or claim 88, the Office should state precisely where in Midgely that functionality is thought to be disclosed; and, the Office should not make the next rejection (if any) final.

For the above-stated reasons, therefore, claim 86 and all claims which depend on it are thought to be patentable over the cited art.

Claim 88 includes limitations similar to those in claim 86. Therefore, claim 88 and all claims which depend on it are also thought to be patentable over the cited art, for reasons similar to those discussed above.

Applicants have not necessarily discussed here every reason why every pending

independent claim is patentable over the cited art; nonetheless, Applicants are not

waiving any argument regarding any such reason or reasons. Applicants reserve the

right to raise any such additional argument(s) during the future prosecution of this

application, if Applicants deem it necessary or appropriate to do so.

Dependent Claims

In view of the above remarks, a specific discussion of the dependent claims is

considered to be unnecessary. Therefore, Applicants' silence regarding any dependent

claim is not to be interpreted as agreement with, or acquiescence to, the rejection of

such claim or as waiving any argument regarding that claim.

Conclusion

For the foregoing reasons, the present application is believed to be in condition

for allowance, and such action is earnestly requested.

If there are any additional charges/credits, please charge/credit our deposit

account no. 02-2666.

Respectfully submitted.

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